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动物分类学报

TWO NEW RECORD GENERA OF STENOSINI (COLEOPTERA, TENEBRIONIDAE) FROM CHINA, WITH DESCRIPTIONS OF TWO NEW SPECIES

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Abstract The two genera, *Tetranillus* Wasmann, 1899 and *Induchillus* Koch, 1941, of the tribe Stenosini Lacordaire, 1859 are newly recorded to the Chinese fauna, and two new species (*Tetranillus longicarinatus* sp. nov. and *Induchillus convexigena* sp. nov.) are described from Xizang. Keys to the known species are given. The type specimens used herein are deposited in the Museum of Hebei University.

Key words Coleoptera, Tenebrionidae, Stenosini, new species, Xizang.

The tribe Stenosini was erected by Lacordaire in 1859. The members of Stenosini are charactered by the body small and slender; head large, wider than pronotum; antennae without club; mentum small, with deep groove, not covering cardines and stipites; eyes sometimes completely divided into two parts; abdomen devoid of intersegmental membrane between visible ventrites 1 and 2. Stenosini is represented in the fauna of all continents of the world but Antarctica and Australia. There are 370 described species, in 30 genera worldwide (Medvedev, 1996). So far as it is known, only 13 species belonging to 6 genera have been recorded from China (Ren & Yu, 1998). Of which, 5 species belonging to 4 genera are known in Xizang (including the newly recorded genera and new species).

Tetranillus Wasmann, 1899 and *Induchillus* Koch, 1941 are newly recorded to the Chinese fauna. The genus *Tetranillus* Wasmann was erected in 1899, for *T. costatus* Wasmann. Two species were described (Wasmann, 1899; Koch, 1940) worldwide before the study, which are distributed in India and Iran. We will describe one new species from Xizang. The genus *Induchillus* was erected by Koch (1941) for *I. cristatus* Koch. Up to the present, four species have been known in the world (including the new species). One species was described by Koch (1941) and two by Kaszab (1981), which are distributed in India. In this paper, a new species of this genus is also described. Keys to the known species are given. The type specimens used herein are deposited in the Museum of Hebei University.

Tetranillus **Wasmann, 1899 New record to China**

Tetranillus Wasmann, 1899: 167; Koch, 1940: 744; Medvedev, 1994: 846; 1996: 103.

Type-species: *Tetranillus costatus* Wasmann, 1899.

Diagnosis. Body elongate. Anterior part of head broadened. Eyes completely divided into upper and lower parts by postgenae. Joint of pronotum and elytra broad, columniform, sharply narrowing to anterior margin and base. Dorsal surface of head and elytra bearing strongly elevated longitudinal carinae. Pronotum narrowly quadrate. Antennae strong and long, apical segments smaller than the anterior ones. Tarsi simple.

Key to the known species of genus *Tetranillus* **Wasmann**

1. Median carina of head longer than lateral carinae; antennomere 3 about 1.2 times as long as antennomere 2; antennomeres 4-9 obviously elongate; pronotum obtrapezoidal, about 1.3 times as long as wide, narrower than head; elytra 2.0 times as long as wide with humeral angles sharp; length: 5.4-6.2 mm …………………………………………………………………… *T. longicarinatus* **sp. nov.**
   Head with median carina not longer than lateral carinae ………… 2
2. Head with median carina not reaching cervical constriction, much shorter than lateral carinae; antennomere 3 about 1.5 times as long as antennomere 2; antennomeres 4-9 obvious square; pronotum 2.0 times as long as wide; elytra 3.0 times as long as wide, humeral angles obtuse; length: 6.0 mm …………………… *T. costatus* **Wasmann**
   Median carina of head reaching cervical constriction, as long as lateral carinae; antennomere 3 about 2.0 times as long as antennomere 2; antennomeres 4-9 square or transverse; pronotum 1.5 times as long as wide; elytra 2.5 times as long as wide, humeral angles sharp; length: 8.2-9.0 mm ………………………… *T. kobmanni* **Koch**

Tetranillus costatus **Wasmann, 1899** (Fig. 1)

Tetranillus costatus Wasmann, 1899: 167; Koch, 1940: 744-745; Medvedev, 1994: 846; 1996: 103.

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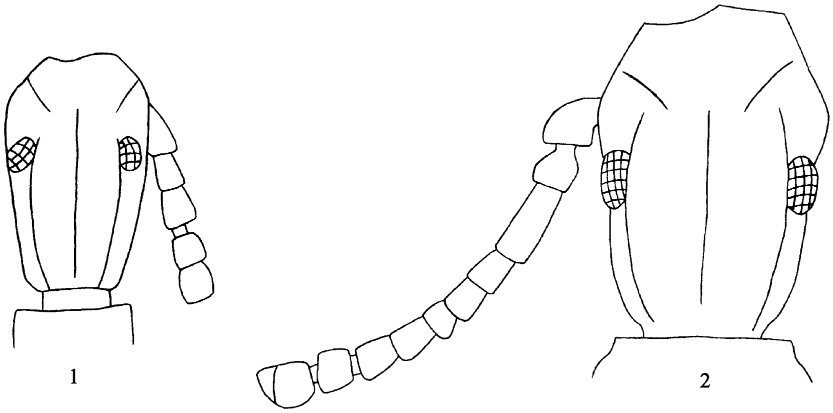


Figs. 1-2. Head in dorsal view. 1. *Tetranillus costatus* Wasmann. 2. *T. kobmanni* Koch. (After Medvedev, 1996)

Distribution. India (Maharastra).

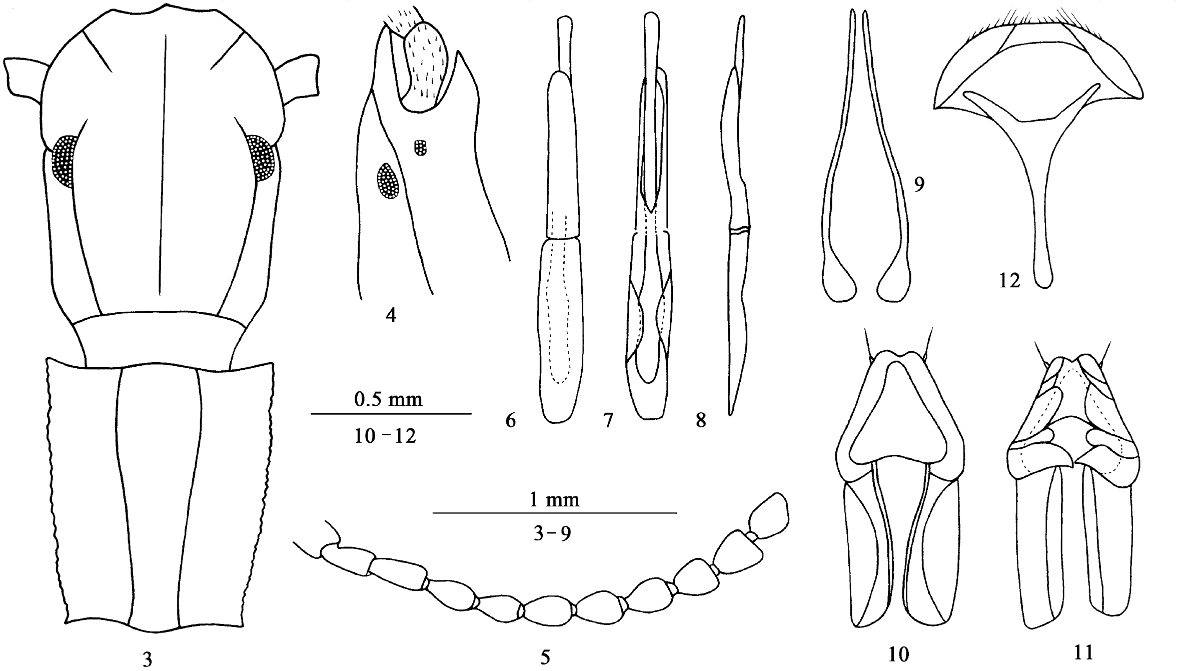
Tetranillus kobmanni **Koch, 1940** (Fig. 2)

Tetranillus kobmanni Koch, 1940: 744-745; Medvedev, 1994: 846; 1996: 103.

Distribution. Iran (Bushire).

Tetranillus longicarinatus **sp. nov.** (Figs. 3-12, 23)

Male. Body saffron-yellow to brown, weakly luster, antennae and palpi with shine. Head elongate-oval, 1.5 times as long as wide, and widest before eyes. Ratio of head width at anterior margin of clypeus/ the maximum width/ width at cervical base= 41∶100∶59. Anterior margin of clypeus asymmetrical: arcuately emarginate at left half and weakly sinuate at right half. Outer margins of genae arcuately converging upon clypeal base. Postgenae almost linearly converging to cervical constriction. Dorsal surface of head weakly convex, densely covered with large punctures; each puncture with a seta, and becoming smaller to anterior margin of clypeus; median carina long, almost reaching anterior margin of clypeus; lateral carinae disappeared in front of eyes, shorter than median carina; postorbital groove deep, reaching cervical constriction. Antennae slender and long, extending to pronotal base; antennomere 11 obliquely truncate at apex; length (width) ratio of antennomeres 2 to 11 as follows: 8.2 (4.4) ∶ 9.1 (4.0) ∶ 8.1 (4.2) ∶ 7.9 (4.2) ∶ 8.0 (4.9) ∶ 8.0 (5.5) ∶ 7.2 (5.8) ∶ 6.5 (6.0) ∶ 7.7 (6.8) ∶ 7.0 (6.3); antennomere 3 about 1.2 times as long as antennomere 2; antennomeres 4-9 obviously elongate.



Figs. 3-12. *T. longicarinatus* sp. nov. 3. Head and pronotum. 4. Head in lateral view. 5. Antenna. 6-8. Aedeagus in dorsal, ventral and lateral view. 9. Spiculum gastrale. 10-11. Ovipositor in dorsal and ventral view. 12. Spiculum ventralle.

Pronotum obtrapezoidal, about 1.3 times as long as wide; pronotal width at anterior margin 1.2 times as wide as base, and 0.9 times as wide as head; lateral margins weakly serrate, regularly converging basad, anterior margin and base slightly bisinuate, weakly protruding at each middle; anterior and posterior angles acute and prominent; disc strongly convex, with wide median depression and 2 sharp carinae, densely covered with large punctures. Propleuron densely punctate. Prosternal process steeply sloping behind coxae. Elytra elongate-oval, 2.0 times as long as wide, widest at the middle, 2.0 times as wide as pronotum, and 1.7 times as wide as head; humeral angles small and pointed. Elytra weakly convex between outer margin of epipleura and sutural margin, with 10 rows of punctures, even interstices sharply carinaed; punctures large, each with a seta. Epipleura with a row of punctures. Visible abdominal sternites covered with punctures, and every one with a seta. Legs slender and long. Tibiae straight, gradually widening apicad, densely covered with golden setae. Ratio of the length of metatarsomeres 1-4 as follows: 10∶7.6∶7.0∶12. Aedeagus flat and long, basiplate almost as long as paramera; outer margins of parameres subparallel-sided. Spiculum gastrale as in Fig. 9.

Female. Not apparent external sexual dimorphism are recognized. Ovipositor as in Figs. 10-11. Spiculum ventralle as in Fig. 12.

Body length 5.4-6.2 mm; width 1.6-1.8 mm.

Holotype ♂, China, Lhasa (29°36′ N, 90°06′ E), Xizang, alt. 3 380 m, 23 Aug. 2003, collected by REN Guo-Dong. Paratypes 5 ♂♂, 2♀♀, same data as the holotype.

Diagnosis. The new species resembles *T. costatus* Wasmann, 1899, but with the following differences: median carina of head longer than lateral carinae; antennomeres 4-9 much longer than wide; pronotum 1.29 times as long as wide; elytra 2 times as long as wide; humeral angles sharp, small and prominent backwards.

Etymology. The new species is named after medial carina of head longer than lateral carinae.

Induchillus **Koch, 1941 New record to China**

Induchillus Koch, 1941: 300; Kaszab, 1981: 308; Medvedev, 1994: 862; 1996: 121.

Type-species: *Induchillus cristatus* Koch, 1941.

Diagnosis. Eyes completely divided into upper and lower parts by cheeks. Genae long, converging immediately behind eyes to cervical constriction. Vertex sometimes forming shallow triangular depression, with or without small median carina; inner margin of eye with sharp (sometimes low) carina. Apical antennomeres short and thick, strongly transverse, antennomere 11 much smaller than antennomere 10. Each elytron with 4 carinae, inner 2 probably developed only at base. Tibiae covered with short setae; Tarsi short, narrowing apicad.

Key to the known species of the genus Induchillus **Koch**

1. Body large (6.5 mm), black ………………………………… 2
   Body small (3.6-5.0 mm), brown or puce ………………………… 3
2. Pronotum widest at anterior margin, strongly and linearly converging basad. 3rd and 5th intervals of elytra with carinae in basal 1/6; length: 6.5 mm ……………………………………… I. cristatus **Koch**
   Pronotum widest immediately before the middle, slightly and arcuately converging anteriad and basad; 3rd and 5th intervals of elytra with carinae along entire length; length: 6.5 mm ……………………… ……………………………………… I. bangaloreanus **Kaszab**
3. Body puce; head elongate-oval, covered with fine punctures; pronotum much longer than wide, with fine punctures; visible abdominal sternites sparsely covered with small punctures; legs slender; length: 5.0 mm ………………… I. andamanus **Kaszab**
   Body brown; head oval, with obscure punctures; pronotum almost as long as wide, densely covered with large punctures; visible abdominal sternites covered with slightly appressed setae, 1 to 3 visible abdominal sternites covered with large punctures; legs strong; length: 3.6-4.1 mm …………………… I. convexigena **sp. nov.**

Induchillus cristatus **Koch, 1941**

Induchillus cristatus Koch, 1941: 300-304; Kaszab, 1981: 309.

Distribution. India (Molwar).

Induchillus bangaloreanus **Kaszab, 1981**

Induchillus cristatus Kaszab, 1981: 309-311.

Distribution. India (Bangalore).

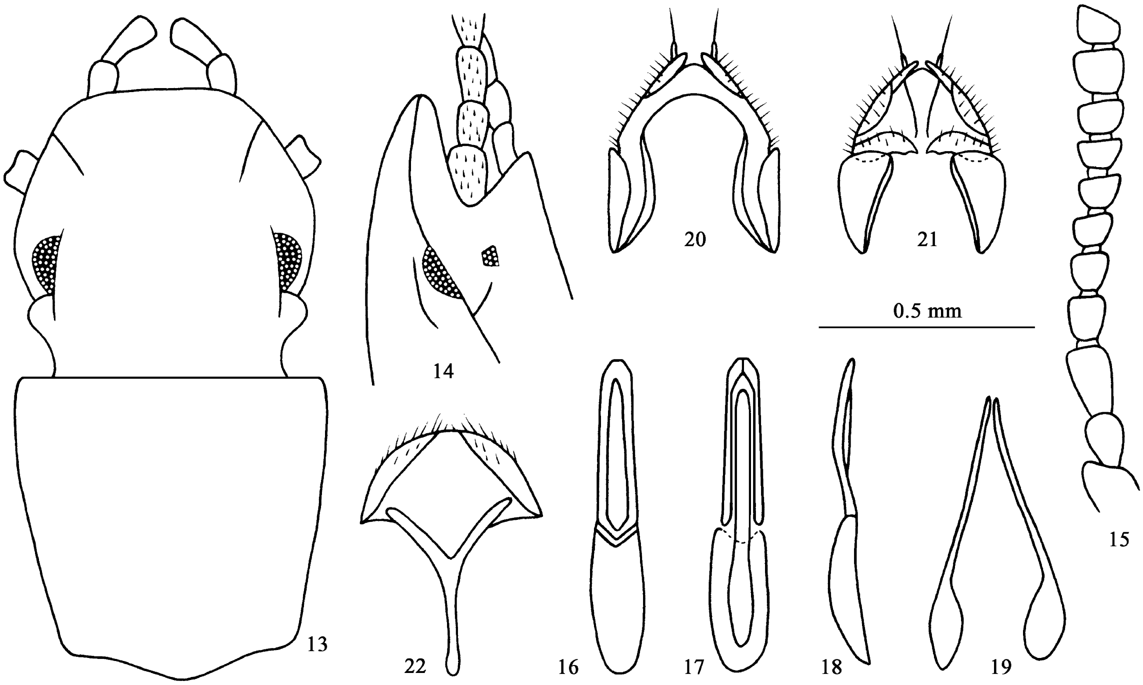
Induchillus andamanus **Kaszab, 1981**

Induchillus cristatus Kaszab, 1981: 310-312.

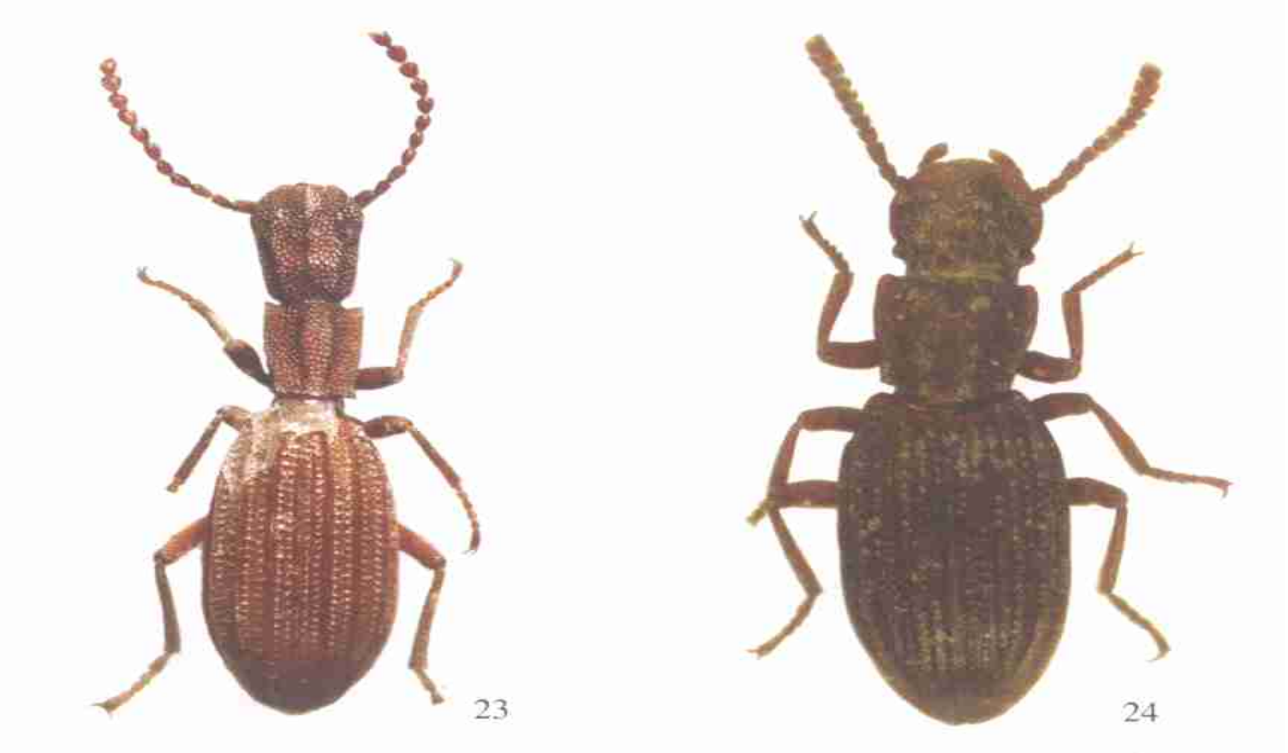
Distribution. India (Andamanen).

Induchillus convexigena **sp. nov.** (Figs. 13-22, 24)

Male. Body brown, weakly shining, antennae, palpi and legs reddish-brown. Head oval, 1.1 times as wide as long, widest at just behind the middle. Dorsal surface of head slightly convex, covered with obscure punctures and light setae, without medial carina, lateral carinae short, covering inner parts of eyes. Ratio of head width at anterior margin of clypeus, the maximum width and to width at cervical base 52∶100∶77. Clypeus straight at apex. Cheeks wide, obviously longer than genae, with outer margins arcuately converging upon clypeal base. Postgenae sharply prominent behind eyes. Antennae short, extending as far as posterior 1/3 of pronotum. Ratio of the length (width) of antennomeres 2 to 11 as follows: 3.5



Figs. 13-22. *I. convexigena* sp. nov. 13. Head and pronotum. 14. Head in lateral view. 15. Antenna. 16-18. Aedeagus in dorsal, ventral and lateral view. 19. Spiculum gastrale. 20-21. Ovipositor in dorsal and ventral view. 22. Spiculum ventralle.



Figs. 23-24. Habitus. 23. *Tetranillus longicarinatus* sp. nov. 24. *Induchillus convexigena* sp. nov.

(3. 0) ∶ 5. 1 (2. 9) ∶ 3. 3 (2. 9) ∶ 2. 3 (3. 0) ∶ 2. 1 (3. 0) ∶ 2. 1 (3. 0) ∶ 2. 1 (3. 0) ∶ 2. 5 (3. 8) ∶ 3. 0 (4. 0) ∶ 3. 0 (3. 9). Pronotum obtrapezoidal, almost as long as wide; anterior margin straight, 1. 2 times as wide as base, and as wide as head; lateral margins almost linearly converging basad, finely bordered throughout; base protruding backward; anterior angles acute; posterior ones obtuse, rounded at apex; disc strongly convex, with shallow medial depression and large punctures. Propleuron covered with large punctures. Prosternal process steeply sloping behind coxae. Elytra elongate-oval, 2. 0 times as long as

wide, almost parallel-sided in midian 1/3, 1.4 times as wide as pronotum; weakly convex between outer margin of epipleura and sutural margin, with 10 rows of punctures separated by 4 carinae in 2 rows, punctures large and obscure, carinae in 3rd and 5th intervals in middle part less developed than near base and at apex, those in 7th and 9th intervals equally sharp along entire length, carinae and even intervals with setae in rows; humeral angles obtusely protruded. Epipleura covered with 1 row of punctures. Visible abdominal sternites densely covered with slightly appressed setae, 1 to 3 visible abdominal sternites with large punctures. Legs strong, tibiae straight, gradually widening to apices; ratio of the length of metatarsomeres 1-4 as follows: 6.0∶2.5∶2.5∶8.0. Aedeagus flat, paramera 1.2 times as long as basiplate. Spiculum gastrale as in Fig. 19.

Female. It has no differences between sexes in external dimorphism. Ovipositor as in Figs. 20-21. Spiculum ventralle as in Fig. 22.

Body length 3.6-4.1 mm; width 1.1-1.2 mm.

Holotype ♂, China, Lhasa (29°36′ N, 90°06′ E), Xizang, alt. 3 380 m, 23 Aug. 2003, collected by REN Guo-Dong. Paratypes 5 ♂♂, 4♀♀, same data as the holotype.

Diagnosis. This new species can be distinguished from *I. andamanus* Kaszab, 1981 by the head oval, covered with obscure punctures; pronotum obtrapezoidal, almost as long as wide, densely covered with large punctures; elytral carina in 3rd interval in middle part less developed than near base; punctures on epipleura becoming finer apicad.

Etymology. The new species is named after sharply protruded postgenae.

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中国细甲族二新纪录属及二新种记述（鞘翅目，拟步甲科）

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摘　要　记述中国细甲族2新纪录属和2新种，前者是四脊细甲属 *Tetranillus* Wasmann, 1899 和印细甲属 *Induchillus* Koch, 1941，后者是长四脊细甲 *T. longicarinatus* sp. nov.（西藏拉萨）和隆颊印细甲 *I. convexigena* sp. nov.（西藏拉萨）。给出了已知种检索表。模式标本保存于河北大学博物馆。

1　长四脊细甲，新种 Tetranillus longicarinatus **sp. nov.**（图3～12，23）

体长5.4～6.2 mm，宽1.6～1.8 mm。

正模　♂，西藏拉萨，3 380 m，2003-08-23，任国栋采；副模5 ♂♂，2♀♀，记录同正模。

新种与 *T. costatus* Wasmann, 1899（印度，马哈拉施特）相近，两者主要区别：前者头部中脊较侧脊长；触角第4～9节长明显大于宽；前胸背板长于宽1.29倍；鞘翅长于宽2.0倍，肩角尖小且后突。

词源：种名意指头部中脊长于侧脊。

2　隆颊印细甲，新种 Induchillus convexigena **sp. nov.**（图13～22，24）

体长3.6～4.1 mm，宽1.1～1.2 mm。

正模　♂，西藏拉萨，3 380 m，2003-08-23，任国栋采；副模5 ♂♂，4♀♀，记录同正模。

新种与分布印度安达曼岛的 *I. andamanus* Kaszab, 1981 相近，两者主要区别：前者头卵圆形并有模糊刻点；前胸背板长宽近等，镶嵌稠密粗刻点；鞘翅第2脊中部较基部低矮；缘折刻点向后渐变细。

词源：种名意指后颊隆起。

关键词　鞘翅目，拟步甲科，细甲族，新种，西藏.

中图分类号　Q969.498.2